

## ABSTRACT

In a digital cordless telephone system, a different speech coding scheme is used in the audio path from the base unit to its remote handset than that which is used in the audio path in the opposite direction from the remote handset to the base unit. It is found that this unbalanced coding scheme optimizes overall system cost and performance. In particular, two different types, quality and/or bit rates of speech encoders are implemented in opposite directions of the same full-duplex audio path, providing an unbalanced coding in a digital cordless telephone.

Implementation of different types of speech encoders in a common full duplex path optimizes system cost and performance. It is recognized by the invention that the communications link in a first direction from a base unit to its remote handset in a digital cordless telephone system potentially requires better codec and audio performance than the communications link in the opposite direction from the remote handset to base unit. Accordingly, to provide maximum efficiency and cost utilization, a digital cordless telephone system architecture and method provides a better speech coder in terms of quality in the base unit to remote handset direction of the communications link.

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